

PATENT SPECIFICATION

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(54) PROTECTIVE GLOVE FOR THE HAND

- (71) I, JHOON GOO RHEE, a citizen of the United States of America of, 2525 N. Ridgeview Road, Arlington, Virginia, United States of America, do hereby declare the invention, for which I pray that a patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement:
- 5 This invention relates to a protective glove adapted to be worn on the hand in the art of karate, kung fu, etc. The art of karate, in particular, is a method developed in Japan for defending oneself without the use of weapons by striking sensitive areas of an attacker's body with the hands, elbows, knees or feet. During training in the art and in organized competition, the hands can become bruised from extensive use of the fingers, palm, backs and sides of the hands, as well as the wrist. The present invention provides a novel glove adapted to protect and prevent injury to the sensitive areas of the body of other persons engaging in the art 10 during training or competition.
- 15 It is an object of this invention to provide a novel protective glove for use in karate sports and the like, which is designed to protect various parts of the hand and wrist of the wearer and which can be easily slipped on or off the wearer's hand.
- 20 Another object of this invention is to provide a novel protective glove of simplified construction, relatively inexpensive and which will obviate injuries to the hand of the wearer and to the body of other persons while engaging in the art of karate, etc.
- 25 Another object of this invention is to provide a novel protective glove which permits the hand of the wearer to be used with the fingers extended or the hand can be used as a fist to deliver various types of blows in the art of karate, etc.
- 30 The present invention provides a flexible protective glove having an aperture in the palm region and unitarily molded and adapted to be worn on and retained on the hand for use in the art of karate and the like, comprising resilient foam material covered with a tough surface casing, a wrist portion to encircle the wrist, a thumb portion including securing means for securing the thumb portion on the thumb, side hand portions on each side of the glove, a thickened portion on the back of the glove to cover the knuckles, a finger portion including securing means for securing the finger portion on at least one finger and a looped portion adapted to secure the glove across the palm of the hand, the material of the glove being such that it can be used in a finger extended position and also in a clenched fist position of the hand.
- 35 The protective glove comprises a resilient material having a tough, outer coating preferably a plastics coating. The glove is designed to allow flexibility as well as protection in the use of the fingers and thumb to permit the optimum use of the hand as a weapon in arts and sports, such as karate, to effectively deliver various types of chops and blows as well as fending off opposing chops and blows. The glove is detachably secured to the hand by securing means, such as strap means, adapted to be easily engaged by the fingers and thumb of the wearer of the glove.
- 40 Other features and advantages of the invention will become apparent from the following description of a specific embodiment of the protective glove taken in connection with the drawings.
- 45 FIGURE 1 is a side elevational view of the novel protective glove of the invention showing it as worn on the hand of a wearer; FIGURE 2 is the opposite side elevational view of the protective glove shown in FIGURE 1;
- 50 FIGURE 3 is a bottom plan view of the protective glove shown in FIGURE 1;
- 55 FIGURE 4 is a front end view of the protective glove shown in FIGURE 1;
- 60 FIGURE 5 is a side elevational view of the protective glove shown in FIGURE 1; showing the glove on the hand of the wearer
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with the hand formed into a fist; and FIGURE 6 is a sectional view taken along line 6—6 of FIGURE 3.

The protective glove of this invention is indicated generally by the numeral 10 in Figure 1 and comprises a unitary molded member formed from a suitable resilient material 12, such as a plastics, polystyrene or polyurethane foam, or a rubber foam. A suitable tough surface coating or casing 14, preferably smooth, covers the resilient material, which can be a tough, pliable material, preferably a suitably plastics material. The coating 14 can be formed during heating and molding of the resilient foam material to produce a fused coating thereon. Alternatively, the surface coating 14 can be formed on the resilient material by dipping or applying a coating of a suitable plastics material or the like. Plastics coatings are preferred since there are available on the market, many rugged tough pliable plastics materials such as polyvinyl chloride. However, it is also contemplated within the concept of the invention that suitable rugged fabric materials, and the like, can be used to cover the resilient material. The coating or covering used should provide a continuous, flexible, tough casing which prevents tearing of the foam material during use of the glove.

Glove 10 comprises a wrist portion 16 encircling the wrist, a thumb portion 18, a thickened portion 20, side hand portions 22 and 23, a finger securing portion 24, and a loop portion 26 adapted to secure the glove across the palm of the hand of the wearer.

The loop wrist portion 16 entirely encircles the wrist of the wearer and extends at the upper part 16a to a section 28 which covers the back part of the hand and to the thickened portion 20. The thumb side portion 16b of wrist portion 16 extends across the side of the hand portion 23 and thumb portion 18. The side 16c of the wrist portion 16 extends across the opposite side of the hand to section 22.

Loop portion 26 is disposed beneath the underside 20a of portion 20 and connects to sides 22 and 23, providing an opening and securing means through which the fingers of the wearer are inserted. When the hand is fully inserted in the glove, the loop portion passes across the palm of the hand.

Thumb portion 18 is flexible and comprises an extended generally thumb-shaped member adapted to be secured to the thumb of the wearer by any suitable means, such as a strap 34, secured around the thumb portion 18. Strap 34, as shown, can comprise any suitable tightening means such as tongue and groove 36. Thumb portion 18 also comprises indentations 30 and 32 around which strap 34 passes and is retained thereon when the strap is tightened around

the thumb, preferably to a pre-tightened position permitting the thumb to be easily inserted or withdrawn whenever the glove is worn or taken off.

The finger securing portion 24 extends downwardly from the mid-portion at the end of thickened section 20, and is adapted to receive and be retained by one or preferably two of the middle fingers of the wearer. Portion 24 comprises indentations 40 and 42 around which a suitable securing means such as strap 44 passes, and is retained thereon when the strap 44 is tightened around the finger or fingers similar to strap 34.

The thickened portion 20 is adapted to provide additional protection to the backs of the fingers in delivering various types of blows in the karate art. Portion 20 is adapted to fold inwardly at the juncture 46 wherein the thickened portion 20 extends from section 28. The underside 20a of portion 20 is an extension of the underside 28a of section 28, and both are adapted to generally conform to the back of the hand. Juncture 46 is generally designed to conform across the knuckles of the hand. Thus, when the hand is formed into a fist as shown in Figure 5, the thickened portion 20 will fold with the fingers providing the additional protection therefor in delivering a blow.

Side portion 22 is adapted to provide additional protection on the side of the hand opposite the thumb side. It is designed in such a manner that when a fist is formed, the sections 22a and 22b will generally fit together to provide the protection to the side of the hand. However, when the glove is worn and the hand is in an extended position as shown in Figure 1, the side 105 portions 22 also covers and provides protection to the side of the hand when delivering various karate chops or in fending off an opponent's blows, etc.

Side hand portion 23 on the thumb side is 110 similarly adapted to provide protection to the side of the hand not covered by the thumb portion 18. It is designed similarly as portion 22 in that when a fist is formed, the sections 23a and 23b will generally fit 115 together to provide protection to the side of the hand. However, as is the case with portion 22, when the hand is in the extended position it also covers and protects the thumb side of the hand and permitting the 120 delivery of various karate chops.

In use, glove 10, is easily worn on the hand by merely inserting the hand and fingers through wrist portion 16, passing the fingers under loop 26, securing one or two of 125 the middle fingers to strap 44 of portion 24, and inserting the thumb under strap 34 of portion 18. As worn on the hand, the glove permits the fingers to be extended and held together to permit the delivery of various 130

types of karate chops with either side of the hand while at the same time providing protection thereto. The unique construction of the glove also permits the hand to be closed or clenched as a fist permitting the wearer to strike a blow with the fist, while particularly protecting the fingers and thumb. The glove is uniquely adapted to be flexible in its various uses and permits 10 desirable quick adaption to various hand forms such as a fist or extended finger positions as required in the fast moving art of karate.

WHAT I CLAIM IS:-

15 1. A flexible protective glove having an aperture in the palm region and unitarily molded and adapted to be worn on and retained on the hand for use in the art of karate and the like, comprising resilient 20 foam material covered with a tough surface casing, a wrist portion to encircle the wrist, a thumb portion including securing means for securing the thumb portion on the thumb, side hand portions on each side of 25 the glove, a thickened portion on the back of the glove to cover the knuckles, a finger portion including securing means for securing the finger portion on at least one finger and a looped portion adapted to 30 secure the glove across the palm of the hand, the material of the glove being such that it can be used in a finger extended

position and also in a clenched fist position of the hand.

2. A protective glove according to claim 1 wherein said thumb and finger portions comprise indentations adapted to retain securing means in the form of straps.

3. A protective glove according to claim 1 or claim 2 wherein said thickened portion is adapted to fold at a juncture with a part of the glove nearer to the wrist portion.

4. A protective glove according to any preceding claim wherein said finer portion extends downwardly from the end of said thickened portion.

5. A protective glove according to any preceding claim wherein said looped portion is integral wth said side hand portions.

6. A protective glove according to claim 3 wherein said side portions and said thumb portions are adapted to fit together when said glove is worn on a hand and folded at said juncture to form a clenched fist.

7. A protective glove substantially as herein described with reference to, or as illustrated in, the accompanying drawings.

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3 SHEETS This drawing is a reproduction of
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 Sheet 1

FIG. 1

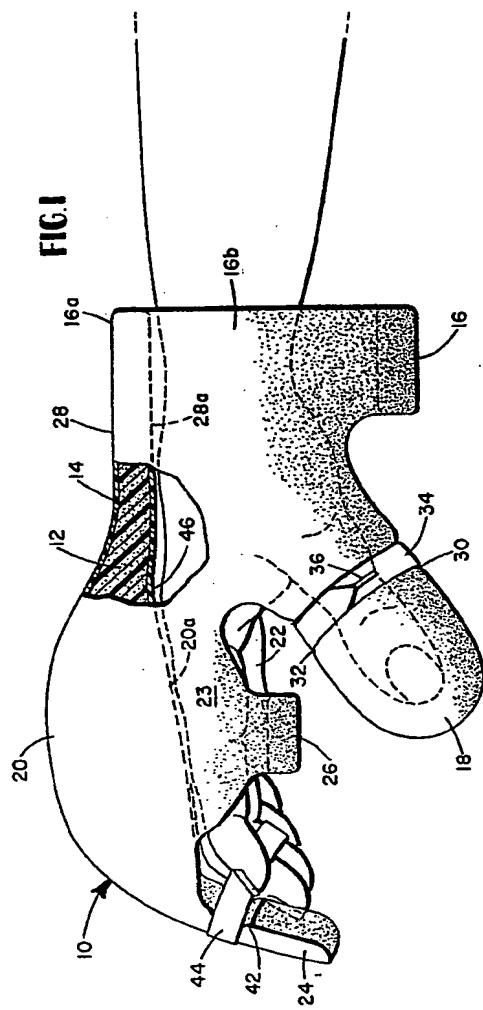
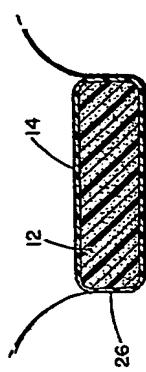


FIG. 6



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COMPLETE SPECIFICATION

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Sheet 2

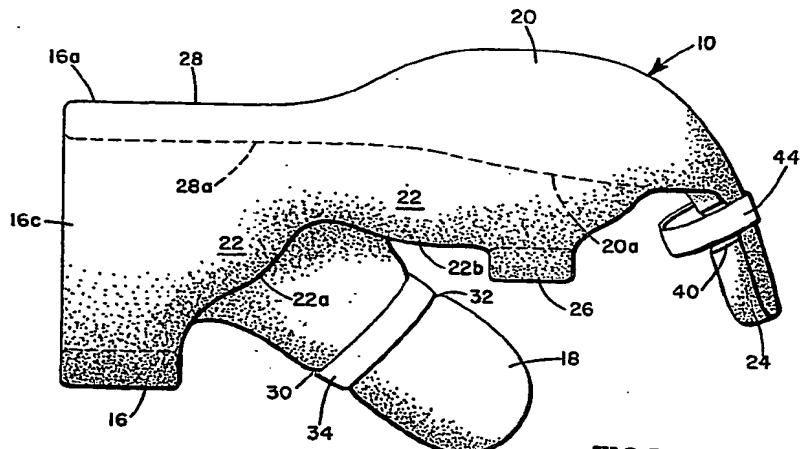


FIG.2

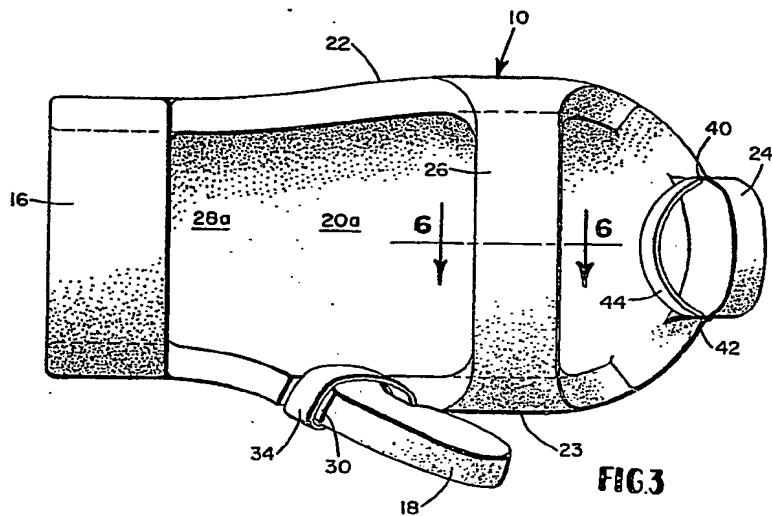


FIG.3

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3 SHEETS This drawing is a reproduction of
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 Sheet 3

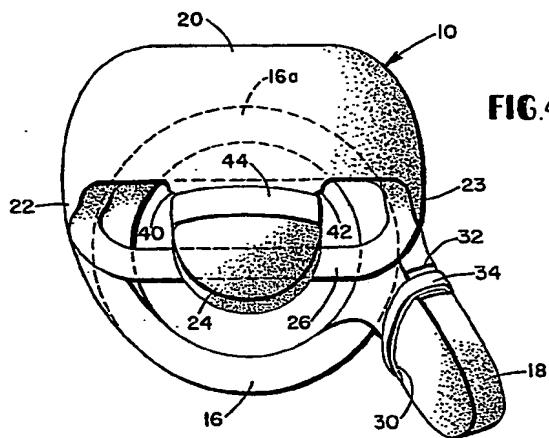


FIG. 4

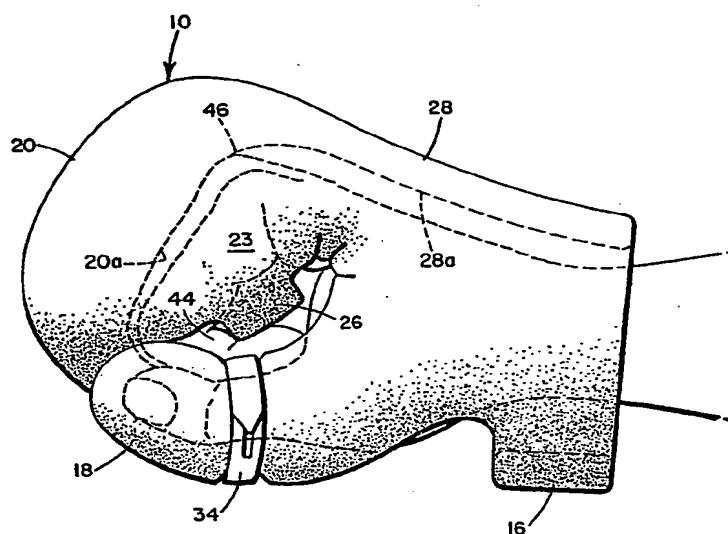


FIG. 5